

Commonwealth of Kentucky
Division for Air Quality
COMMENTS RECEIVED AND RESPONSE

ON THE CONDITIONAL MAJOR DRAFT PERMIT F-04-021

Fort James Operating Company
451 Harbison Rd
Lexington, Kentucky 40511
April 8, 2005
Mark Labhart, Reviewer
Plant I.D. #: 021-067-00052
Application Log #: 55234
Agency Interest #: 1051
Activity I.D.#: APE20040002

SOURCE DESCRIPTION:

Fort James Operating Company is a wholly owned subsidiary of the Georgia Pacific Corporation. The source manufactures disposable, sanitary, food and beverage containers (paper and plastic). Emissions units at the facility are (2) flexographic presses emitting VOC, (4) polystyrene extruders emitting HAP and VOC, and (4) existing polypropylene extruders that emit VOC and PM, plus (1) additional polypropylene extruder to be added with this permit action. There are also PM emissions from various material handling processes. Criteria pollutants, NO_x and CO are emitted at approximately 50% of major source thresholds from the source's numerous heating devices. Insignificant activities include truck unloading and packaging operations including bagging operations and sealing cartons.

PUBLIC, AFFECTED STATE AND U.S. EPA REVIEW:

On October 1, 2004, the public notice on availability of the draft permit and supporting material for comments by persons affected by the plant was published in *The Lexington Herald Leader* in Lexington, Kentucky. The public comment period expired 30 days from the date of publication.

Comments were received from Fort James Operating Company on October 22, 2004. Listed below are the comments received and the Division's response to each. Minor changes were made to the permit as a result of the comments received, however, in no case were any emissions standards, or any monitoring, recordkeeping or reporting requirements relaxed. Detailed explanation of the changes made to the permit and the supporting documentation are given below. The U.S. EPA was given an additional 45 days to comment on the draft permit. No comments were received from the EPA. There are no other States affected by this permit action. The permit is now being issued final.

COMMENTS RECEIVED AND RESPONSE:

Mr. Kraig Weber, Environmental Coordinator with Fort James Operating Company, submitted the comments on the Conditional Major Air Quality Permit.

COMMENTS RECEIVED AND RESPONSE:

Permit Statement of Basis

1. Page 1, Comments – The emission factor for styrene emissions from EP01 needs to be adjusted from 1.025 lbs/ton to 0.2563 lbs/ton. The four extruders are parallel to each other, not in series. That is to say the plastic material processed through these extruders does not flow from one extruder to the second to the third, etc. All plastic material flows through only one extruder and then continues through the process. So, for all plastic material processed through these extruders, the styrene emission factor 0.2563 lbs/ton should be applied, not four times the styrene emission factor.

Division's response: The Division concurs with this comment. Changes made to the emission factors.

2. Page 2, Comments – EP02 and EP03. No credit was given in the calculations for the use of emission control units, specifically, the cyclones used in the transfer of material to the holding silos. If they are in place and do affect emissions, why shouldn't they be accounted for in emissions calculations?

Division's response: Certainly, the cyclones would capture some of the dust, but the question remains as to what percentage of the dust is being collected, what is the size distribution of the dust particles being collected, etcetera. The point of the exercise was to determine whether Fort James would be in compliance with regulation 401 KAR 59:010 with respect to particulate emissions. Rather than try to determine all relevant parameters, the reviewer decided to check if Fort James would be in compliance assuming the worst-case scenario. Once it was determined that Fort James would very likely comply with the regulation, there was no reason to refigure the emissions for more precision.

Conditional Major Permit

Page 2, Section B, 2. A.

1. On page 2, Emission Limitations, Georgia-Pacific assumes the visible emissions from each stack limit is referring to the one stack from the Sternvent filter system. Is the 20% opacity limit instantaneous or a 6-minute average? Is this the same for all opacity limits listed in the permit?

Division's response: There are 3 questions here. Replies to each are as follows.

- *The opacity limit is for emissions from the process "into the open air from a control device or stack". In this case, the Sternvent filter system.*
- *Opacity of continuous emissions are measured by EPA Reference Method 9 which is a measurement over a 6-minute average.*
- *The opacity limit above is the same for all the affected facilities in this permit subject to Regulation 59:010.*

Page 2, Section B, 2. A.

2. Also, for determining hourly operating rates, our current method is to track the total material consumed per month and divide by the operating hours for that month. Is this an acceptable method for determining hourly usage rates?

Division's response: In reference to the particulate emission limitations of 401 KAR 59:010, it is not necessary to track the hourly emission rates. Based on review of the processes, the Division has determined that Fort James will comply with the hourly emission rates if regular maintenance and inspections are performed to the control equipment. Note that compliance with the regulation is demonstrated by filter inspections and opacity observations as listed under the Monitoring and Recordkeeping requirements.

Page 3, Section B, 2. B.

3. On page 3, the styrene emission factor is 1.025 lbs/ton. As noted above, this should be 0.2563 lbs/ton.

Division's response: The Division concurs with this comment. Changes made to the emission factors.

Page 7, Section B, 5. A.

4. On page 7, Compliance Demonstration Method: We do not currently have a method of tracking glue consumption other than accounting standards. We can begin calculating monthly usage by manually tracking the totes of glue consumed. There is some glue from each tote that is drained and disposed of as solid waste. The quantity of glue disposed of will be subtracted from the total usage for the month. Is this an acceptable method?

Division's response: Yes. Alternatively, if there is an accounting system for tracking the total amount of glue that is disposed of as solid waste each month, this amount could be subtracted from the total amount of glue used each month, as determined by purchasing records. Whatever method is most efficient for Fort James. The key point is to have some type of record(s), which will show how the total amount of glue used is determined.

Page 10, Section B, 2 (1)

5. On Page 10, Emission Limitations: There is a visible emissions limit from each stack at 20% opacity. This condition should be removed because the dust collection systems exhaust inside the facility.

Division's response: It is not possible to eliminate requirements from an applicable regulation. However the Division concurs that the particulate emissions from this process to the open air will be minimal because the equipment exhausts inside of the building. The permit language has been revised to reflect to compliance based on the fact that the equipment does not exhaust to the open air.

Also it was necessary to remove the reporting requirement associated with the opacity observations, Paragraph 6 – change to “None”.

11. Page 10, Section B, 4. B.

6. The same holds true for paragraph 4-b on page 10, which calls for monthly opacity determinations. Opacity measurements are general applied outdoors due to the nature of the test. This condition should be removed since the discharge is indoors.

Division's response: The Division agrees with this point that opacity observations are not possible from this process. See comment above.

12. Page 12, Section B, 4. A.

7. On page 12, paragraph 4. The filter inspection schedule for the rail car unloading system is calling for inspection prior to each use. We request that the filter inspection schedule be adjusted to match all of the other filter inspection schedules listed in the permit at 1/month.

Division's response: This point was discussed in a meeting between representatives of Fort James and the Division. According to Fort James, the filter is difficult to re-seat in the housing and is potentially damaged by repeated opening of the filter housing for inspection. The permit has been revised so to allow Fort James to perform the filter inspections once per month as requested. In place of the filter inspections, Fort James will perform a quantitative opacity observation from the resin silo(s) during each unloading event. Since the railcar unloader is a part of a system for filling the resin silos, and since the railcar unloader is partially enclosed/sheltered by the building whereas the resin silos are located out in the open air, the Division believes this adjusted monitoring schedule to be equivalent if not more stringent than the monitoring requirements proposed in the draft permit. See also the Division's response to the comment below.

13. Page 13, Section B, 4. B.

8. On page 13, paragraph B. There is a requirement to perform a visual observation on the resin silos while in operation at least once per operating month. This presents a problem as some of the silos will not be in operation during a given month and if they do operate it may be for a short time at a time when a certified observer is not available or conditions prevent observation.

Division's response: If an opacity observation is made each time a silo is being filled, the frequency at which an individual silo is used does not matter because each silo will be monitored 100% of the time it is in use. With the revised monitoring requirements above, the permittee will be required to note from which silo the opacity observation was made. Also language was added to the permit to address those times when the opacity observations cannot be made due to adverse ambient conditions.

14. Page 16, Section C,

9. On page 16, we need to add an insignificant activity. There are two humidification units used at the facility. A component of each humidification unit, there is a natural gas burner rated at 0.45MM BTU/hr. These should be included on the list of insignificant activities.

Division's response: Activity added.

16. Page 19, Section F, Paragraph 2

10. On page 19 in Paragraph 2. There are no strip chart recordings on these operations. This requirement should be removed.

Division's response: This is standard language used by the Division. The items listed are used as examples of the types of records that may be required to support calculations or demonstrate good environmental practices. Not all items listed here would be applicable to all sources, nor is this list meant to be exhaustive. For a specific example: you are calculating emissions from the cup forming

process based on the amount of glue used. If some of that glue is being disposed of as solid waste, it will be necessary to keep records of the amount of wasted glue, to show that this amount should not be included in the total emissions calculation. As a further example, suppose that a particulate filter needed repairs in excess of the normal filter change. A record of that repair will help show that Fort James is operating” in a manner consistent with good air pollution control practice for minimizing emissions”, (reference, 401 KAR 50:055, Section 2 (5)).

17. Page 19, Section F, Paragraph 3

11. On page 19 in Paragraph 3. “all hours of operation” is included in the definition of reasonable times. The plant operates 24hrs/day, and during off shifts, the office that contains environmental files is locked. It may be more reasonable to limit reasonable times to regular office hours and during an emergency.

Division’s response: Fort James’ request is reasonable. However this language is directly from the regulation 401 KAR 52:030 under which this permit is issued. The Division cannot revise the language unless the regulation is changed.

18. Page 19, Section F, Paragraph 5

12. On page 19, Paragraph 5. Can we get clarification on what types of reports, if any, are required as part of our permit?

Division’s response: Refer to the Specific Reporting Requirements of Section B. Twice a year, Fort James will submit their actual HAP emissions for each month during the 6-month period, and the rolling 12-month total HAP emissions for each month within the reporting period. It is not necessary to report particulate filter inspections or opacity observation, the exception being when there is some type of equipment failure leading to excessive opacity (particulate) emissions. (See for example, Section B, Page 13, Paragraph 6). Also it will be necessary to submit an annual compliance certification as required under Section F.9.

Please note; an Environmental Inspector will always contact a facility following the issuance of a permit to discuss any compliance questions the permittee may have. This question can be answered in greater detail at that time.

19. Page 21, Section F, Paragraph 10

13. On page 21, Paragraph 10. Can we change the phrase “the date the KEIS emission survey is mailed to the permittee” to “the date the KEIS emission survey is received by the permittee”?

Division’s response: This is standard Division language, however as written, it should not represent any great additional difficulties for Fort James. The KEIS emissions surveys are mailed around January 1st of each year. The semiannual emissions report is due on January 30th. When compiling the data for the semiannual report that is due in January, Fort James will have the rolling 12-month total HAPs emissions for the previous year. These are the emission totals that need to be reported on the KEIS emissions survey.

19. Page 25, Section G, Paragraph 5

14. On page 25, Paragraph 5. This should be removed. With the exception of the polypropylene line, which will be starting up shortly, prior to permit issuance, all affected facilities are already in operation. The polypropylene line start up is covered under a separate set of General Provisions elsewhere in the permit.

Division's response: This is again standard language. Paragraph 5 begins as follows, "This permit shall allow time for the initial start-up, operation, and compliance demonstration of the affected facilities listed herein." Admittedly the term "herein" is somewhat vague, however it is only a reference to the affected facilities listed in Section G, under subpart (d). All of Page 25, Section G (d), Paragraphs 1-6, are the general requirements for start-up of the new polypropylene line.

CREDIBLE EVIDENCE:

This permit contains provisions which require that specific test methods, monitoring or recordkeeping be used as a demonstration of compliance with permit limits. On February 24, 1997, the U.S. EPA promulgated revisions to the following federal regulations: 40 CFR Part 51, Sec. 51.212; 40 CFR Part 52, Sec. 52.12; 40 CFR Part 52, Sec. 52.30; 40 CFR Part 60, Sec. 60.11 and 40 CFR Part 61, Sec. 61.12, that allow the use of credible evidence to establish compliance with applicable requirements. At the issuance of this permit, Kentucky has not incorporated these provisions in its air quality regulations.